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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,710	10/09/2001	Peggy-Jean P. Flanigan	55526US003	7863
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3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427				
			EXAMINER SIMONE, CATHERINE A	
			ART UNIT 1772	PAPER NUMBER

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/974,710

Applicant(s)

FLANIGAN ET AL.

Examiner

Catherine Simone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8,10-17,19-22 and 25-60 is/are pending in the application.
- 4a) Of the above claim(s) 36-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8,10-17,19-22,25-35 and 53-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

***Withdrawn Rejections***

1. The 35 U.S.C. 102 rejection of claims 1-8, 22, 25 and 27 as anticipated by Ishikawa et al. of record in the Office Action mailed 9/22/04, Pages 4-5, Paragraph #16 has been withdrawn due to the Applicants amendment filed 12/22/04.
2. The 35 U.S.C. 102 rejection of claims 1, 3-8 and 21 as anticipated by Sekisui et al. of record in the Office Action mailed 9/22/04, Pages 5-6, Paragraph #17 has been withdrawn due to the Applicants amendment filed 12/22/04.
3. The 35 U.S.C. 103 rejection of claims 10, 12, 14 and 15 over Ishikawa et al. in view of Hata of record in the Office Action mailed 9/22/04, Pages 9-10, Paragraph #20 has been withdrawn due to the Applicants amendment filed 12/22/04.
4. The 35 U.S.C. 103 rejection of claims 10, 12, 14 and 15 over Ishikawa et al. in view of Hata of record in the Office Action mailed 9/22/04, Pages 9-10, Paragraph #20 has been withdrawn due to the Applicants amendment filed 12/22/04.
5. The 35 U.S.C. 103 rejection of claims 11, 13, 16 and 17 over Ishikawa et al. in view of Sher et al. of record in the Office Action mailed 9/22/04, Pages 10-11, Paragraph #21 has been withdrawn due to the Applicants amendment filed 12/22/04.

***Repeated Rejections***

6. The 35 U.S.C. 102 rejection of claims 53-55 as anticipated by Ishikawa et al. has been repeated for the reasons previously set forth in the Office Action mailed 9/22/04, Pages 4-5, Paragraph #16.
7. The 35 U.S.C. 102 rejection of claims 1-8, 11, 19, 20, 22, 26-35 and 53-55 as anticipated by Abe has been repeated for the reasons previously set forth in the Office Action mailed 9/22/04, Pages 6-9, Paragraph #18.
8. The 35 U.S.C. 103 rejection of claims 56-60 over Hata has been repeated for the reasons previously set forth in the Office Action mailed 9/22/04, Page 11, Paragraph #22.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

10. Claims 1-8, 11, 13 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Tajima et al. (JP 08-100155; refer to computer translation).

Tajima et al. discloses an article comprising at least one adhesive layer (Drawing 1, #1) with a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface; and a cap layer (Drawing 1, #5) laminated to the structured surface of the adhesive layer wherein the exposed surface of the cap layer is unstructured, and wherein the structured surface of the adhesive layer is discontinuously in contact with the cap layer. Regarding claim 2, the cap layer is a backing (Drawing 1, #5). Regarding claims 3 and 4, the at least one adhesive layer comprises pressure sensitive adhesive

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such as acrylics (see paragraph 0012, lines 1-4). Regarding claim 5, the article has a thickness of about 2  $\mu\text{m}$  to about 500  $\mu\text{m}$  (see paragraph 0005, lines 5-8). Regarding claim 6, the adhesive layer is a structured adhesive layer (Drawing 1, #1). Regarding claim 7, note at least one non-adhesive layer in contact with one of the first and second major surfaces (Drawing 1, #2).

Regarding claim 8, the article comprises a non-structured exposed surface (Drawing 1, #5).

Regarding claims 11 and 13, note a plurality of channels containing at least one deliverable or non-deliverable substance (Drawing 3, #4). Regarding claim 21, the second major surface is a structured surface (Drawing 1, #1), the cap layer (Drawing 1, #5) contacts the first major surface, and wherein the article further comprises a backing layer (Drawing 1, #2) on the second major surface.

11. Claims 1-8, 11, 13, 20, 22 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 1 511 060.

Regarding claims 1 and 22, GB 1 511 060 discloses a tape comprising at least one pressure sensitive adhesive layer (Figs. 1-4, #2) comprising a first major surface and a second major surface, wherein the first major surface is a structured surface and the second major surface is a non-structured surface; and a non-adhesive cap layer (Figs. 3 and 4, #5) laminated to the first major surface, wherein the structured surface of the adhesive layer is discontinuously in contact with the cap layer. Regarding claim 2, the cap layer is a backing (Figs. 3 and 4, #5). Regarding claims 3 and 4, the adhesive is a pressure sensitive adhesive consisting of natural and synthetic rubbers (see page 5, lines 105-110). Regarding claim 5, the article has thickness of about 2  $\mu\text{m}$  to about 500  $\mu\text{m}$  (see page 3, lines 45-47). Regarding claim 6, the adhesive layer is a structured adhesive layer (Figs. 1-4, #2). Regarding claim 7, note at least one non-adhesive layer

in contact with one of the first and second major surfaces (Figs. 1-4, #1). Regarding claim 8, the article comprises a non-structured exposed surface (Figs 1-4, #1). Regarding claim 11, the article comprises a plurality of channels (Fig. 3-2, #7). Regarding claim 13, the channels contain at least one deliverable or non-deliverable substance (see page 2, lines 80-96). Regarding claims 20 and 26, note a backing adjacent the second major surface (Figs. 1-4, #1).

12. Claims 1-8, 10, 12, 14, 15, 19-22, 25, 26 and 28-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Hata (WO 97/33946).

Regarding claims 1 and 22, Hata discloses a tape comprising at least one pressure sensitive adhesive layer (Fig. 2a, #10 and Fig. 7, #302) comprising a first major surface (Fig. 2a, #2) and a second major surface (Fig. 2a, #5), wherein the first major surface is a structured surface and the second major surface is a non-structured surface; and a non-adhesive cap layer (Fig. 2a, #3 and Fig. 7, #308) laminated to the first major surface, wherein the structured surface (Fig. 2a, #11) of the adhesive layer is discontinuously in contact with the cap layer. Regarding claim 2, the cap layer is a backing (Fig. 2a, #3) and an adhesive (Fig. 7, #305). Regarding claims 3 and 4, the adhesive is a pressure sensitive adhesive consisting of acrylics (see page 12, lines 13-16). Regarding claim 5, the article has thickness of about 2  $\mu\text{m}$  to about 500  $\mu\text{m}$  (see page 9, lines 1-2). Regarding claim 6, the adhesive layer is a structured adhesive layer (Fig. 2a, #11 and Fig. 7, #302). Regarding claim 7, note at least one non-adhesive layer in contact with one of the first and second major surfaces (Fig. 2b, #6 and Fig. 7, #301). Regarding claim 8, the article comprises a non-structured exposed surface (Fig. 2a, #5 and Fig. 7, #304). Regarding claims 10, 12, 14 and 15, the article comprises a plurality of discrete reservoirs, each reservoir having a void volume of less than 100  $\mu\text{l}$  and contains at least one deliverable or non-deliverable

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substance (see page 10, lines 30-32 and page 3, lines 6-11). Regarding claim 19, the cap layer is a laminate (Fig. 7, #304 and #305). Regarding claims 20 and 26, note a backing adjacent the second major surface (Fig. 2b, #6). Regarding claim 21, note the second major surface is a structured surface (Fig. 7, #302), the cap layer contacts the first major surface (Fig. 7, #304 or #305), and wherein the article further comprises a backing layer on the second major surface (Fig. 7, #301). Regarding claim 25, the tape has a peel strength of at least 21-42 oz/0.5 inch for a thickness of 0.003 to 0.007 inches (see page 14, lines 16-20). Regarding claim 28, note a second adhesive layer (Fig. 3a, #13) having a first major surface and a second major surface, wherein at least one of the first and second major surfaces is a structured surface, wherein the adhesive layer and the second adhesive layer are in contact (see page 16, lines 24-31). Regarding claim 29, the first major surface of the first adhesive layer is a structured surface and the second major surface of the first adhesive layer is a non-structured surface (Fig. 3a, #10), and the first major surface of the second adhesive layer is a structured surface and the second major surface of the second adhesive layer is a non-structured surface (Fig. 3a, #13), and the second major surface of the first adhesive layer contacts the first major surface of the second adhesive layer. Regarding claim 30, note a backing (Fig. 3a, #6) on the second major surface of the second adhesive layer (Fig. 3a, #13). Regarding claim 31, note a cap layer (Fig. 3a, #3) on the first major surface of the first adhesive layer (Fig. 3a, #10). Regarding claim 32, the first major surface of the first adhesive layer (Fig. 3a, #10) contacts the first major surface of the second adhesive layer (Fig. 3a, #13). Regarding claim 33, note further a backing layer on the second major surface of the first adhesive layer (Fig. 3a, #6). Regarding claim 34, the first adhesive layer has a first pattern of structures on the first major surface (Fig. 3a, #10) thereof and the second adhesive layer has a

second pattern of structures on the first major surface thereof (Fig. 3a, #13), and wherein the first pattern is substantially aligned with the second pattern (Fig. 3a). Regarding claim 35, the first pattern is misaligned with the second pattern (Fig. 3a).

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Tajima et al. (JP 08-100155) or GB 1 511 060 in view of Sher et al. (US 6,197,397).

Both Tajima et al. and GB 1 511 060 each disclose the article as claimed in claim 1. However, each fails to disclose the deliverable or non-deliverable substance being selected from the groups recited in each of claims 16 and 17. Sher et al. teaches that it is old and well-known in the analogous art to have an adhesive provided with channels containing fluids for the purpose of permitting controlled ingress of fluids at a desired time to affect the adhesive interface such as to facilitate removal, alter surface characteristics and provide additional remedial treatments (see col. 5, lines 33-37 and col. 8, lines 55-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the channels in either Tajima et al. or GB 1 511 060 to contain at least one deliverable or non-deliverable substance such as liquids and antibiotics as taught by Sher et al. in order to permit



controlled ingress of fluids at a desired time to affect the adhesive interface such as to facilitate removal, alter surface characteristics and provide additional remedial treatments.

***Response to Arguments***

15. Applicant's arguments filed 12/22/04 have been fully considered but they are not persuasive. First, Applicants argue "Claim 53 recites the cap layer comprises an adhesive having a non-structured exposed surface. The Examiner points to Figure 2. However, Ishikawa fails to teach that the base film #2 is an adhesive layer." However, it is to be pointed out in Figure 2 of Ishikawa that the adhesive layer #3 is the cap layer and has a non-structured exposed surface and the base film #2 is the at least one first layer with a first major surface and a second major surface wherein at least one of the first and second major surfaces is a structured surface. Therefore, Ishikawa clearly teaches the present invention as claimed in claim 53.

Applicants further argue that "Abe fails to disclose a "structured" surface in the adhesive as recited in the present claims. Abe states that the adhesive surface is uneven. Page 2, line 20 of Abe. However, the structured surface of the present invention includes structures with specific shapes. See page 7, lines 9-10 of the application as filed." However, it is to be pointed out that in the Specification of the present application on page 7, lines 9-10, the structures are not being specifically defined. Therefore, the recitation "structured surface" as recited in the present claims is interpreted in the broadest sense. The adhesive layer in Abe does have an uneven surface yet it is a structured surface. Thus, Abe clearly teaches an adhesive layer with a structured surface as claimed in the present application.

Furthermore, Applicants argue that “The Examiner states that making the claims void volumes would be obvious as an optimum range. However, the Examiner has provided no motivation to do so. Therefore, no *prima facie* case of obviousness has been made with respect to the rejected claims.” Hata clearly teaches an adhesive layer (Figs. 1a and 1b, #1) with a structured surface and the structured surface having a plurality of discrete reservoirs (Figs. 1a and 1b, #4) each having a volume (see page 10, lines 30-32). However, Hata fails to teach the volume being less than about 20 nL. The optimum range for the volume would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant’s invention was made to have modified the reservoirs in Hata to each have a volume of less than 20 nL, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP 2144.05 (II)*.

### ***Conclusion***

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

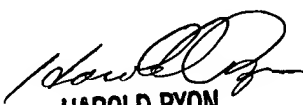
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAS

Catherine A. Simone  
Examiner  
Art Unit 1772  
April 6, 2005

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

4/11/05